Class 6

Public-Private collaboration:
SMS for Life
Today’s plan

• Logistics and notices
  – Photographers in class Thursday, for Sloan. Please sit next to Nick if you don’t want to be pictured.
  – Thursday: Assignments back to you; more on steps and timing for final presentations

• SMS for Life
  – Malaria
  – Who’s involved? (contrast PDPs; BVGH, MMV)
  – How did Jim do it? key activities
  – How it worked; your assessment of value. In context of shared value ideas?
  – Next steps?

• Coming up: Great case, this time via a TED talk and a paper. Prep carefully. Interactive class session coming! We’ll talk about the Gupta reading then too.
  – BRAC reading to be added for next Tuesday
What do we need to know about Malaria to discuss this case?

- dx (symptomatic, blood microscope, RDT)
- incidence; BoD
- prevention (travelers’ experience vs. people who live there—very different!) vs treatment; no vaccine
- prevention: quinine, mefloquine, doxy, sulfa. pyr.,
re BoD
Dr Ally Mohamed, Programme Manager, National Malaria Control Programme, Tanzania

The malaria situation in Tanzania

http://www.youtube.com/watch?v=J3xdQ4MAORY
first 32 seconds—underscores case data
where would you start, to make an impact on malaria?
Diagram removed due to copyright restrictions. See [http://www.who.int/malaria/en/](http://www.who.int/malaria/en/).
Speaking of which, a guide to global health players could come in handy

• useful brief downloadable: http://www.cgdev.org/blog/meet-global-health-family-cheat-sheet

• also see this interactive timeline: http://www.dipity.com/GHhub/Global-Health-Care/
Where in the value chain to intervene?

Diagram of factors limiting effectiveness of treatment removed due to copyright restrictions. See "Breaking Down Barriers to Access," Novartis Malaria Initiative.
Novartis AG provides healthcare solutions that address the evolving needs of patients and societies. Focused solely on healthcare, Novartis offers a diversified portfolio to best meet these needs: innovative medicines, cost-saving generic pharmaceuticals, preventive vaccines, diagnostic tools and consumer health products. Novartis is the only company with leading positions in these areas. In 2007, the Group’s continuing operations (excluding divestments in 2007) achieved net sales of USD 38.1 billion and net income of USD 6.5 billion. Approximately USD 6.4 billion was invested in R&D activities throughout the Group. Headquartered in Basel, Switzerland, Novartis Group companies employ approximately 97,000 full-time associates and operate in over 140 countries around the world.

*from* MMV-Novartis press release 15 February 2009
Novartis was named a Super Sector Leader by the Dow Jones Sustainability Index in 2007. In the same year, 66 million patients around the world benefited from Novartis programs valued at USD 937 million. These initiatives range from drug donation and research programs to combat neglected diseases like malaria, tuberculosis and leprosy in developing nations, to patient assistance programs that help cancer patients receive the most innovative and effective treatments available.

*from* MMV-Novartis [press release](#) 15 February 2009
Novartis’ role in malaria treatment

• Why all six elements?

  - Innovation
  - Partnerships
  - Treatment
  - Access
  - Research & Development
  - Capacity building
Since 2001, in a unique collaboration with international organizations, Novartis has provided more than 215 million Coartem treatment courses for public sector use in malaria-endemic developing countries without profit. Thanks to production efficiency gains and increasing demand for Coartem, Novartis has driven down the cost in order to make it more accessible to people with malaria. After nearly halving the price since launch, the average cost of a full treatment course is 0.80 USD.

from MMV-Novartis press release 15 February 2009
Figure removed due to copyright restrictions. Malaria treatment timeline, from "First-in-class Treatment." Novartis Malaria Initiative.

Figure removed due to copyright restrictions. Minimum 14 months lead time, from "A Complete Production Process." Novartis Malaria Initiative.
Useful overview of SMS for Life; features video
http://malaria.novartis.com/malaria-initiative/access/expanding-access-through-innovative-channels/index.shtml
“SMS for Life”

Improving medicine access through initiative
9 weeks surveillance visits starting on
(1) 23rd November 2009
(2) 4th January 2010
(3) 8th February 2010

District Kigoma Rural
Region Kigoma
Zonal Store in Tabora
Live 22nd Oct 2009
51 Health Facilities

Dar es Salaam
Training 25th Sept 2009
MSD, NMCP

District Lindi Rural
Region Lindi
Zonal Store in Mtwara
Live 1st Oct 2009
48 Health Facilities

District Ulanga
Region Morogoro
Zonal Store in Dar es Salaam
Live 15th Oct 2009
30 Health Facilities

Image by MIT OpenCourseWare.
A mobile phone displaying the stock request message sent to registered health workers.

http://www.plosone.org/article/info:doi/10.1371/journal.pone.0054066
Screenshots of SMS for Life web-based reporting tool.

http://www.plosone.org/article/info:doi/10.1371/journal.pone.0054066

Courtesy Githinji S., et al. License: CC-BY.
Weekly proportion of health facilities that responded to stock request messages and SMS formatting errors.
Accuracy of SMS reported stock parameters.


http://www.plosone.org/article/info:doi/10.1371/journal.pone.0054066
SMS for Life 21-week pilot program in Tanzania: Stock management of antimalarials is improving thanks to increased transparency and simpler communication. Figure removed due to copyright restrictions. See "Expanding Access Through Innovative Channels," Novartis Malaria Initiative.
Partners in the post-pilot Tz scaleup (see B case)

- **Novartis** is a pharmaceutical company based in Basel, Switzerland. In 2001, the company began a programme to produce and distribute an anti-malarial product ‘Coartem’ without seeking profit on the costs. By 2010, they had distributed over 320 million doses. Jim Barrington, former chief of Information for Novartis, took the overall lead in driving the project and defining the solution for SMS for life.

- **Medicine for Malaria Venture** is a not-for-profit public-private partnership established in Switzerland, 1999. Its mission is to reduce the burden of malaria by improving the delivery of new anti-malarial drugs. Its donors include The Bill and Melinda Gates Foundation and UKAID. They invested $300,000 to support the national roll out of SMS for life.

- **The Swiss Development Corporation** (of the Swiss Government) donated $550,000 for national roll out.

- **Vodaphone** helped design and implement the technical solution for the pilot. It paid MatsSoft LTD to develop software for pilot, provided handsets and SMS costs.

- **IBM** provided management support of project and the software **Lotus Live** which enabled all partners to co ordinate inputs. Extreme Blue (IBM’s summer intern programme) was responsible for originating of the idea of an SMS based stock management system for SMS for Life.

- **The Tanzanian Ministry of Health and Social Welfare**: The National Malaria Control Programme (NMCP) is considered the owner SMS for Life. Responsible for all project activities such as planning, implementation & evaluation; the NMCP also makes sure that all the districts selected are fully engaged in the process.

- **Vodacom** is a local Tanzanian Mobile Provider (majority owned by Vodaphone). Vodacom provided smart phones for use by District Medical Officers in the national roll out of SMS for Life.

- **PSI** (Social marketing and Communications for Health) Tanzania: PSI provides malarial control support to national Ministries of Health in over 30 countries around the world, tailoring its programmes to the environment of the location. PSI Tanzania was responsible for training of central management, district and local personnel during the roll out.

- **Roll Back Malaria Partnership (RBM)**: Founded in 1998 by UNICEF, The World Health Organisation (WHO), the World Bank and United Nations Development Fund. RBM is a massive global partnership of over 500 organisations (public and private), that provide a global, neutral, and consensus building forum for the key actors in malaria control to coordiante action against the disease. The expertise, resources and commitment of its partners that range from the academic to corporate spheres, ensure malaria remains high on political agendas and that innovative ideas such as SMS for Life can be enabled and nurtured.
DEBATES & SERIES

UP FOR DEBATE: How do we Cure mHealth Pilotitis?

mHealth has the potential to transform healthcare, particularly for the hardest-to-reach women and children around the world. The debate about exactly how, when, and in what form is alive and well. Successful pilots are in abundance, but most of the sector has been slow to reach scale. In short, the sector has a case of mHealth Pilotitis. In the first debate of a series on mobile health, the Skoll World Forum on Social Entrepreneurship partnered with Johnson & Johnson and Stanford Social Innovation Review to surface important lessons and learning from some of the world’s leading organizations who have taken mHealth services to scale. This debate will also set the stage for a larger discussion on mobile for development at this year’s Skoll World Forum in Oxford, UK.

More on SMS for Life and Novartis’ work in Malaria

- [http://www.youtube.com/watch?v=p9R3Szi5gNo](http://www.youtube.com/watch?v=p9R3Szi5gNo) VofA story
More information on class themes

- [http://www.nature.com/nature/outlook/malaria_2012/index.html](http://www.nature.com/nature/outlook/malaria_2012/index.html) for more on Malaria
- great FT supplement on malaria (April 2013) [http://www.rbm.who.int/worldmalaria-day/_docs/FT-WMD2013-supplement.pdf](http://www.rbm.who.int/worldmalaria-day/_docs/FT-WMD2013-supplement.pdf) & also see 2011 story on industry pledge for affordable drugs [http://www.ft.com/intl/cms/s/0/7e921dae-e2db-11e0-903d-00144feabdc0.html#axzz2fpx7agAl](http://www.ft.com/intl/cms/s/0/7e921dae-e2db-11e0-903d-00144feabdc0.html#axzz2fpx7agAl); 2009 piece on need for drug development [http://www.ft.com/intl/cms/s/0/36e4f5a4-b2fb-11e0-86b8-00144feabdc0.html#axzz2fpx7agAl](http://www.ft.com/intl/cms/s/0/36e4f5a4-b2fb-11e0-86b8-00144feabdc0.html#axzz2fpx7agAl)
- MMV—nice intro and review of first 10 years: [https://www.youtube.com/watch?list=PL43FB4ADA7C1C02C4&feature=player_detailpage&v=Q44GvOD5-gA](https://www.youtube.com/watch?list=PL43FB4ADA7C1C02C4&feature=player_detailpage&v=Q44GvOD5-gA) –this is PDP (product development partnership). Consider with respect to Sekhri, Feachem & Ni and other readings in syllabus.
- A recent set of resources related to mHealth from K4Health —just one of many potential starting points for learning more, but it has a nice roundup. Also see Skoll World Forum resources on mHealth
15.232 Business Model Innovation: Global Health in Frontier Markets
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